



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

MAY 05 2014

City of Bridgeport
Attn: Robert Hedman
School Construction Department
City of Bridgeport Public Schools
City Hall, 999 Broad Street
Bridgeport, Connecticut 0604

Re: PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c)
and § 761.79(h)
Central High School
Bridgeport, Connecticut

Dear Mr. Hedman:

This is in response to the Notification¹ by the City of Bridgeport (the City) on behalf of City of Bridgeport Public Schools, for approval of a proposed plan to address PCB contamination at the building known as Central High School located at One Lincoln Boulevard in Bridgeport, Connecticut (the Site). The Site contains PCB-contaminated materials that exceed the allowable PCB levels under 40 CFR § 761.20(a), § 761.61, and § 761.62. Specifically, PCBs have been found in caulk and in the adjacent building substrates (i.e., brick and concrete).

In its Notification, the City has proposed the following PCB cleanup and disposal plan:

- Remove *PCB bulk product waste* (i.e., caulk associated with exterior concrete columns/rooftop coping stones, and exterior expansion joint caulk along with one (1) brick on each side of the joint, and PCB-contaminated ceiling tiles), and dispose of in a state-approved non-hazardous waste landfill in accordance with § 761.62(b);

¹ The Notification was prepared by Fuss & O'Neill, Inc. on behalf of the City of Bridgeport to satisfy the requirements under 40 CFR §§ 761.61(a) and (c), and § 761.79(h). Information was submitted dated October 16, 2013 (Self-Implementing On-Site Clean-up and Disposal Plan for PCB Containing Material (SIDP)); March 7, 2014 (Response to EPA Comments, Revised SIDP); April 8, 2014 (email Response to EPA questions concerning *Excluded PCB products* and soil remediation); April 24, 2014 (conversation with Kevin McCarthy concerning caulk between brick façade and coping stones); and May 1, 2014 (Response to EPA question concerning the stone panel). These submittals together shall be referred to as the "Notification".

- Encapsulate the *porous surfaces* (i.e., exterior concrete columns/roofing coping stone joint plus 6 inches in either side of the joint) with greater than ($>$) 1 part per million (ppm) PCB concentration with an epoxy coating and/or acrylic-based coating;
- Remove bulk *PCB remediation waste* (i.e., soils) to a depth of 36 inches and a distance of 60 inches from the building foundation and dispose of as a *PCB remediation waste* in accordance with § 761.61(a)(5)(i)(B)(2)(iii); and,
- Conduct verification sampling in accordance with Subpart O to confirm that the PCB concentrations in soils and *porous surfaces* (i.e., expansion joint brick) are less than or equal to (\leq) 1 ppm.

The City has determined that certain PCB-contaminated building materials (i.e., exterior and interior window/door and vent caulk, interior and exterior window glazing, mastic, and cove base glue) found in the High School, which have PCB concentrations of less than ($<$) 50 ppm meet the criteria for an *Excluded PCB Product* as defined under § 761.3. Under the PCB regulations, *Excluded PCB Products* are authorized for use and thus there is no requirement to remove the *Excluded PCB Products* or to decontaminate surfaces that are in contact with these products. While these building materials are not addressed in the Approval, the City is proposing to remove the PCB products containing PCBs with > 1 ppm but < 50 ppm and to manage these products in accordance with the Connecticut Department of Energy and Environmental Protection (CTDEEP) regulations.

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.62(b) and § 761.79(h) for abatement and disposal of PCB caulk and §§ 761.61(a) and (c) for cleanup of soils and decontamination and/or encapsulation of the *porous surfaces*. EPA finds that the proposed encapsulation of PCB-contaminated *porous surfaces* should effectively prevent direct exposure of these PCB-contaminated *porous surfaces* to building users provided the encapsulated surfaces are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

The City may proceed with its project in accordance with 40 CFR §§ 761.61(a) and (c); § 761.62(b); § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the long-term monitoring sampling indicate an unreasonable risk to the building users.

Please be aware that this Approval requires the City to conduct outreach activities for the school community, including students, parents, and school employees concerning the PCB remediation work. Documentation of the outreach effort shall be submitted to EPA. (Attachment 1, Approval Condition 18)

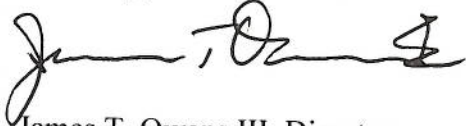
Please note that the City will be required to record a notation on the deed for the Site as required under § 761.61(a)(8) since PCBs at > 1 ppm will remain on the Site.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in black ink, appearing to read "James T. Owens III", is written over a horizontal line.

James T. Owens III, Director
Office of Site Remediation & Restoration

cc Kevin McCarthy, Fuss & O'Neill
Gary Trombly, CTDEEP
File

Attachment 1 – PCB Approval Conditions

ATTACHMENT 1:

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
CENTRAL HIGH SCHOOL (the Site)
BRIDGEPORT, CONNECTICUT**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification.
2. The City of Bridgeport (the City) on behalf of City of Bridgeport Public Schools, shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. The City must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the City shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. The City is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the City has or receives information indicating that the City or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the City are authorized to conduct the activities set forth in the Notification. The City is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the City from compliance with any applicable requirements of federal, state or local law; or 3) release the City from liability for, or otherwise resolve any violations of federal, state or local law.
9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

10. This Approval may be revoked if the EPA does not receive written notification from the City of its acceptance of the conditions of this Approval within 10 business days of receipt.
11. The City shall submit the following information to EPA:
 - a. a certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. a contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
 - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

DECONTAMINATION AND DISPOSAL CONDITIONS

12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

13. *PCB bulk product waste* (i.e., all caulk associated with exterior concrete columns/rooftop coping stones, and exterior expansion joint caulk along with one (1) brick on each side of the joint, and PCB-contaminated ceiling tiles) shall be removed and disposed of as described in the Notification.
14. *Porous surfaces* with greater than ($>$) 1 part per million (ppm) PCBs (i.e., exterior concrete columns/roofing coping stone joint plus 6 inches in either side of the joint) shall be encapsulated with an epoxy coating and/or acrylic-based coating as described in the Notification. Following encapsulation, sampling of the encapsulated *porous surfaces* shall be conducted to determine the effectiveness of the encapsulation.
 - a. Wipe sampling of encapsulated *porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100\text{ cm}^2$). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - b. In the event that the PCB concentration of any wipe sample is $> 1\text{ }\mu\text{g}/100\text{ cm}^2$, and if this standard cannot be achieved with the application of additional encapsulant, the City shall contact EPA for further discussion and direction on alternatives.
15. The cleanup standard for bulk *PCB remediation waste* (i.e., soil) and *porous surfaces* (i.e., brick at the expansion joint) shall be less than or equal to (\leq) 1 ppm for unrestricted use or disposal.
 - a. All soil verification samples shall be collected on a bulk basis (i.e., mg/kg) and analytical results reported on a dry-weight basis. Samples shall be collected in accordance with 40 CFR 761 Subpart O.
 - b. Sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches. Verification samples shall be collected in accordance with 40 CFR 761 Subpart O.
 - c. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.

16. Within 30 days of receipt of this Approval, the City shall submit its proposed plan for post-caulk abatement indoor surface sampling and indoor air sampling for EPA review and approval.
 - a. Wipe sampling of indoor surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100\text{ cm}^2$). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q. The laboratory reporting limit shall be $\leq 1\text{ }\mu\text{g}/100\text{ cm}^2$.
 - b. Indoor air sampling shall be conducted in accordance with EPA Method TO-10A or EPA Method TO-4A. Sufficient sample volumes shall be collected to provide a laboratory reporting limit of $\leq 0.050\text{ }\mu\text{g}/\text{m}^3$ for total PCBs. PCB analysis shall be conducted for PCB homologues and/or PCB congeners by EPA Method 680 or EPA Method 1668, or equivalent.
17. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
 - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.
18. The City shall conduct outreach activities for the school community, including students, parents, and school employees on the PCB remediation work. The City shall submit information on its outreach activities within 30 days of receipt of this Approval.

DEED RESTRICTION AND USE CONDITIONS

19. Within thirty (30) days of completing the activities described in the Notification and in the Approval, the City shall submit for EPA review and approval, a draft deed restriction for the Site where PCBs > 1 ppm remain. The deed restriction shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site, if any; and, the long-term monitoring and maintenance requirements on the Site. Within seven (7) days of receipt of EPA's approval of the draft deed restriction, the City shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

20. Within 60 days of completion of the work authorized under this Approval, the City shall submit for EPA's review, a detailed monitoring and maintenance implementation plan (MMIP) for the surface encapsulants/coatings. The City shall incorporate any changes to the MMIP required by EPA.
- a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements, as applicable.
 - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including teachers, parents, student, other on-site workers, and interested stakeholders.
 - c. The MMIP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the surface encapsulants/coatings.
 - d. The City shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the encapsulants/coatings.
 - e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.

21. The City shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the City to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
22. Any modification(s) in the plan, specifications, or information submitted by the City, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. The City shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.
23. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from the City to make a determination regarding potential risk.
24. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

RECORDKEEPING AND REPORTING CONDITIONS

25. The City shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by the City in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
26. As required under Condition 20 of this Approval, the City shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.

27. The City shall submit a final report as both a hard copy and electronic version, to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities with photo-documentation; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of; copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The Report shall also include a copy of the recorded deed restriction and a certification signed by a City official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
28. Required submittals shall be mailed to:
- Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 – (OSRR07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527
29. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1